

## BRIEFER ARTICLES.

### NOTES ON TWO SPECIES OF BRASSICA.

BRASSICA SINAPISTRUM Boiss. In the *Synoptical Flora*, i. pt. 1, 134, it was stated that only the smooth-fruited form of this species had been introduced into North America, such being the inference derived from the specimens examined in the preparation of that work. During the present summer, however, the writer has found a number of specimens of this species, growing on railway ballast near West Cambridge, Mass., which have hispid fruit. This form occurred in company with the more typical plant, and appeared on close comparison to differ from it in no regard other than the one mentioned. Furthermore, the pubescence of the fruit, although more or less striking when well developed, passed in other specimens into minute sparse hairs, so that transitions to the smooth-fruited forms were by no means lacking. Indeed, in some cases, the pubescence of the different siliques on the same individual differed considerably, being somewhat more conspicuous upon the lower, earlier-formed fruit. In both the smooth-fruited and hispid-fruited forms the pedicels are often hirsutulous. Both forms of fruit have long been recognized in the Old World, but the differences have been rightly regarded as formal rather than varietal.

B. JUNCEA Coss.—In May 1895, Professor Britton (*Bull. Torr. Bot. Club* 22: 225) called attention to the frequent occurrence of this Asiatic species in waste places of southern New York, Pennsylvania to Michigan and Virginia. It had previously been found in several parts of New England, and has since proved locally abundant in eastern Massachusetts and in New Hampshire. After giving a good description of *B. juncea*, in the place cited, Professor Britton states that it is "readily distinguished from *B. Sinapistrum* Boiss. by the total absence of the hispid pubescence of that species and by its erect longer subulate-beaked pods." Having had this summer excellent opportunities of comparing many dozen specimens of each of these species growing side by side, the writer would suggest that the distinctive characters

here brought forward are by no means the most reliable. For the hispid pubescence is not always absent upon *B. juncea*, although always much less conspicuous than in *B. Sinapistrum*; the trichomes, when present, being confined to the lower leaves and lower part of the stem. Furthermore, the siliques of *B. Sinapistrum* vary greatly in position, being sometimes subappressed and sometimes widely spreading, so that they are accordingly either erect or very oblique. As to the length of the fruit there is no great difference between the two species, but if a distinction can be made on this feature it would seem that the fruit of *B. Sinapistrum* rather than of *B. juncea* was in general the longer.

On the other hand, several characters furnish very definite and constant differences. In the first place, *B. juncea* is a taller and much paler plant, having a distinctly glaucous stem and more or less glaucescent leaves, while *B. Sinapistrum*, at least as it occurs about Boston, is never glaucous at all. Then in *B. Sinapistrum* the upper leaves are broadest near the rather abruptly contracted base, while in *B. juncea* they are gradually cuneate at the base. But perhaps the most striking difference is in the fruiting pedicels, which in *B. Sinapistrum* are short and thick, being only about 4 or rarely 6<sup>mm</sup> long, while in *B. juncea* they are much more slender and 6 to 10<sup>mm</sup> in length. The beak of the fruit in *B. juncea* is slender, subulate, and apparently always empty. In *B. Sinapistrum*, on the other hand, it is rather stout, decidedly ancipital, and commonly contains one seed.

By these characters the plants in question can be readily distinguished, and when once recognized are not likely again to be confused. *B. juncea* seems already to be the commoner species of the two about Boston. Its rapid distribution and establishment in the United States recalls that of *Lactuca Scariola*, or the more recently disseminated *Sisymbrium altissimum*. The best illustration of *B. juncea* is that of Duthie and Fuller in their *Field and Garden Crops of the Northwestern Provinces and Oudh* (plate 41).—B. L. ROBINSON, *Harvard University*.

#### A NEW MAMILLARIA.

**Mamillaria Brownii**,<sup>1</sup> n. sp. Glaucous, globose, 5 to 8<sup>cm</sup> high, simple: tubercles 20 to 28<sup>mm</sup> long, at first terete but later becoming more or less quadrangular at base, very broad and large, the

<sup>1</sup>This plant will be *Cactus Brownii* to those who prefer the generic name *Cactus*